

## CLAIMS

1. A method of generating C code on the basis of UML specifications, characterized in that a detailed implementation model is produced in UML code, that the model thus created is exported in the form of a file in the XMI language, that this XMI file is dispatched to a file generation engine which is the "Model In Action" tool, that this tool is associated with a scripts parametrization application, and that this tool is made to produce files in the C language, namely ".C" files, ".H" files, a generation report file, configuration management "batch" files and compilation project files.  
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2. The method as claimed in claim 1, characterized in that the C code generated covers 100% of the UML specification of the software, the whole generation spectrum being processed both statically and dynamically.  
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3. The method as claimed in claim 1 or 2, characterized in that the model is produced with the aid of a UML modeling tool.  
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4. The method as claimed in claim 3, characterized in that the UML modeling tool is "RHAPSODY" from the company I-LOGIX.
5. The method as claimed in one of the preceding claims, characterized in that the generation report file comprises the following information:  
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  - version number of the reference report,
  - version number of the current report,
  - designation of the UML model with its state and its version number,
  - designation of the software collections produced with their state and their version number,
  - designation of the generation scenarios with their state and their version number,
  - designation of the files generated with their state and their version number,
  - name of the scenario in progress,  
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-name of the generated text files of the scenario.

6. The method as claimed in claim 5, characterized in that the scenarios are of the "Clearcase" type.
7. The method as claimed in claim 5 or 6, characterized in that the states of the files generated are comparison states with respect to those of a previous generation (reference generation).
8. The method as claimed in claim 6, characterized in that the state of each file is one of the following:
  - 10 -new,
  - unmodified,
  - modified,
  - modified manually,
  - modified and modified manually,
  - 15 -eliminated.